

Specifications

SpO₂:

Measurement Range: 0 ~ 100%
Accuracy: ±2% during 70%~100%
0%~69% unspecified

Pulse Rate:

Measurement Range: 25 bpm ~ 300 bpm
Accuracy: 1 bpm or ±2%
whichever is greater

EtCO₂:

Measurement Range: 0~150mmHg
Resolution: 0.1mmHg (0~69)mmHg
0.25mmHg (70~150)mmHg
Accuracy: ±2mmHg (0~40)mmHg
±5% (41~70)mmHg
±8% (71~100)mmHg
±10% (101~150)mmHg

Warm-up Time: 10 seconds
Response Time: 8mS

Respiration Rate:

Measurement Range: 0~150bpm
Accuracy: ±1bpm

Alarm:

Three levels of visual, audio alarms

Data Transmission:

2.4GHz wireless
USB to PC
≤10m without obstruction

Power Requirements:

DC: 9V 700mA
4x2400mAh rechargeable batteries
Battery Capacity: ≥ 12 hours (SpO₂ only)
Battery Capacity: ≥ 4.5hours (SpO₂ + CO₂)

Environment:

Operating Temperature: 0°C~50°C
Humidity: ≤95%
Altitude: -390m~5,000m
Transport/Storage Temperature: -20°C~70°C
Humidity: ≤95%

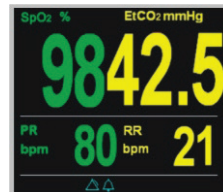
Physical Characteristics:

Dimensions: 73mm (W) x127mm (H) x 23mm (D)
Maximum Weight: 500g

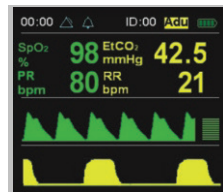
Compliance:

1. SpO₂: ISO 9919: 2005(E)
2. Safety Standards:
EN 60601-1: 1990+A1: 1993+A2: 1995+A13: 1996
3. Alarm: IEC60601-1-8: 2005
4. EMC: EN 60601-1-2: 2007, Group 1 Class A
5. Environment : WEEE (2002/96/EC)

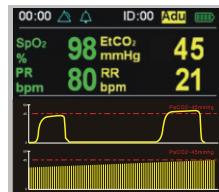
Display Options



Large Font/Digits



Dural Waveforms



Historical Trend



Trend Chart

Configurations

- NT1D-V-B Handheld Mainstream CO₂ Monitor
- NT1D-V-C Handheld Sidestream CO₂ Monitor
- NT1D-V-D Handheld SpO₂ & Mainstream CO₂ Monitor
- NT1D-V-E Handheld SpO₂ & Sidestream CO₂ Monitor

NT1D-V
Monitoring & Critical Care

Handheld Capnography Pulse Oximetry Monitor



Handheld Capnography/Pulse Oximetry Monitor

Compact, Reliable and High Performance

Vital Signs monitoring
in anesthetized animals

- ◆ Measures EtCO₂, respiration rate, SpO₂ (optional) and pulse rate
- ◆ About the size of a smartphone
- ◆ New, high-definition, bright color screen
- ◆ Choose between mainstream or sidestream CO₂
- ◆ Diagnostic CO₂/SpO₂ waveforms
- ◆ Audible/visual physiological and technical alarms
- ◆ User adjustable alarm limits
- ◆ Pre-set alarm limits for cats, dogs and horses
- ◆ Three-hour graphical trend review
- ◆ Up to 99 patient Ids
- ◆ Operates on four "AA" NiMH 2400mAh – 2500mAh rechargeable batteries (>4.5 hrs) or AC power
- ◆ Power charger/cradle included

While pulse oximeters monitor oxygen saturation in anesthetized animals, hypercapnia occurs more commonly than hypoxemia. Affordable, portable monitors are available to measure exhaled CO₂.

Low ETCO₂ levels are most commonly a result of hyperventilation or diluted exhaled carbon dioxide caused by high oxygen flow rates such as those used with non-rebreathing systems. Sudden significant reductions in ETCO₂ can be due to airway occlusion, ET tube dislodgement, disconnection or cardiac arrest. Capnometers are also useful during CPR to determine ETCO₂ production as an indicator of return of CO₂ production and blood flow through the lungs.

NT1D puts the ultimate "anesthesia disaster early warning system" into the palm of your hand.

NT1D is compact and portable, with a crisp high-definition color screen and the choice between mainstream and sidestream CO₂ combined with digital pulse oximetry. It's designed to provide immediate clinical feedback of actual expired CO₂. The NT1D helps provide critical information during anesthesia, such as anesthetic depth, cardiac output and perfusion, and reliable respiration.



Sidestream CO₂ module sampling at <50 mm/sec. Perfect for your smallest patients or horses with large ET tubes



Solid-state, durable mainstream CO₂ probe for intubated patients



CO₂ kits include sampling tubes and adapters in two sizes to help minimize dead space for safer, more accurate readings. Sidestream sample lines have built-in filters for moisture management without messy water traps.



Solaris[®] pulse ox sensors include durable non-slip clips in two size, and we include a 10 ft. extension cable. Most frequently applied to the tongue, they can also be used on the lip, ear, toe-webbing, prepuce or vulva.

Normal ETCO₂ levels are 35-45 mmHg. The most common cause of increased ETCO₂ is hypercapnia secondary to anesthetic-induced hypoventilation. Normal healthy animals can tolerate some increase in carbon dioxide levels (up to 60-70 mmHg) without suffering detrimental effects. Extremely high carbon dioxide levels (> 100 mmHg) can cause narcosis and exacerbate deep levels of anesthesia. The simplest way to correct high ETCO₂ is to simply ventilate ("bag") the animal more frequently.

